

SIWEK, Waclaw; STANOSEK, Jozef

Correlation between Jirgl's flocculation test and alkaline phosphatase activity in the blood in patients with infectious hepatitis. Prezegl. epidem. 16 no.2:149-153 '62.

1. z Kliniki Chorob Zakaznych AM w Bytomiu Kierownik: prof. dr
K. Szymonski.

(LIVER FUNCTION TESTS) (PHOSPHATASES blood)
(HEPATITIS INFECTIOUS blood)

SIWEK, Waclaw; STANOSEK, Jozef

Usefulness of Jirgl's test in differentiating jaundice. Polski
tygod. lek. 17 no.25:996-969 18 Je '62.

l. Z Kliniki Chorob Zakaznych Sl. AM w Bytomiu; kierownik: prof.
dr med. Karol Szymonski.
(LIVER FUNCTION TESTS) (JAUNDICE diag)

KON'KOV, N.G., inzhener-podpolkovnik; SIVTSOV, V.T., podpolkovnik

He gave his word and kept it. Vest.Vozd.Fl. no.8:24-32 Ag '61.
(MIRA 14:8)

(Airplanes, Military—Maintenance and repair)

SIVTSOVA, A. S.
SHMILOVICH, L. A.; SIVTSOVA, A. S.

Combined therapy of schizophrenia. Zh. nevropat. psichiat., Moskva
(CLML 22:2)
52 no. 3:59 Mar 1952.

1. Of Kursk Psychoneurological Hospital (Head Physician -- A. V.
Nikitina).

SIVTSOVA, Ye, A.

"Tuberculin Patch Test in Children," Prob. Tuber., No. 1, 1943. Mbr., Clinic
Children's Diseases, Stalingrad Med. Inst., -c1949-

SIVTSEVA, Ye. A.

"Intestinal Protozoa of Stalingrad Children." Cand Med Sci, Stalingrad
State Medical Inst, Stalingrad, 1954. (RZhBiol, No 3, Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher
Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

SIVTSOVA, Ye. P.

"The Calculation of Pressure-Free Single-Stage and Two-Stage Linear-Type Needle-
Filter Units." Cand Tech Sci, All-Union Sci-Res Inst of Bases and Foundations.
23 Dec 54. (VM, 10 Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational
Institutions (12)

ss: SUM No. 556, 24 Jun 55

SIVTSOVA, Ye.P.

Approximate method for computing the settlement of pile foundations. [Trudy] NIIOSP no.36:34-42 '59.
(Piling (Civil engineering)) (Foundations)

(MIRA 13:5)

SIVTSOVA, Ye.P.

Calculation of the settling of a single pile on the basis of the
theory of elasticity. [Trudy] NIIOSP no.45:5-15 '61. (MIRA 15:1)
(Elasticity) (Piling (Civil engineering))

SIVTSOVA, Ye.P.

Calculating settling of an individual pile taking into account its point.
[Trudy]NII osn. no.53:47-66 '63. (MIRA 17:1)

MOISEYEV, K.I., student; SIVUKHA, M.I., student; SHUL'KIN, Yu.P., student

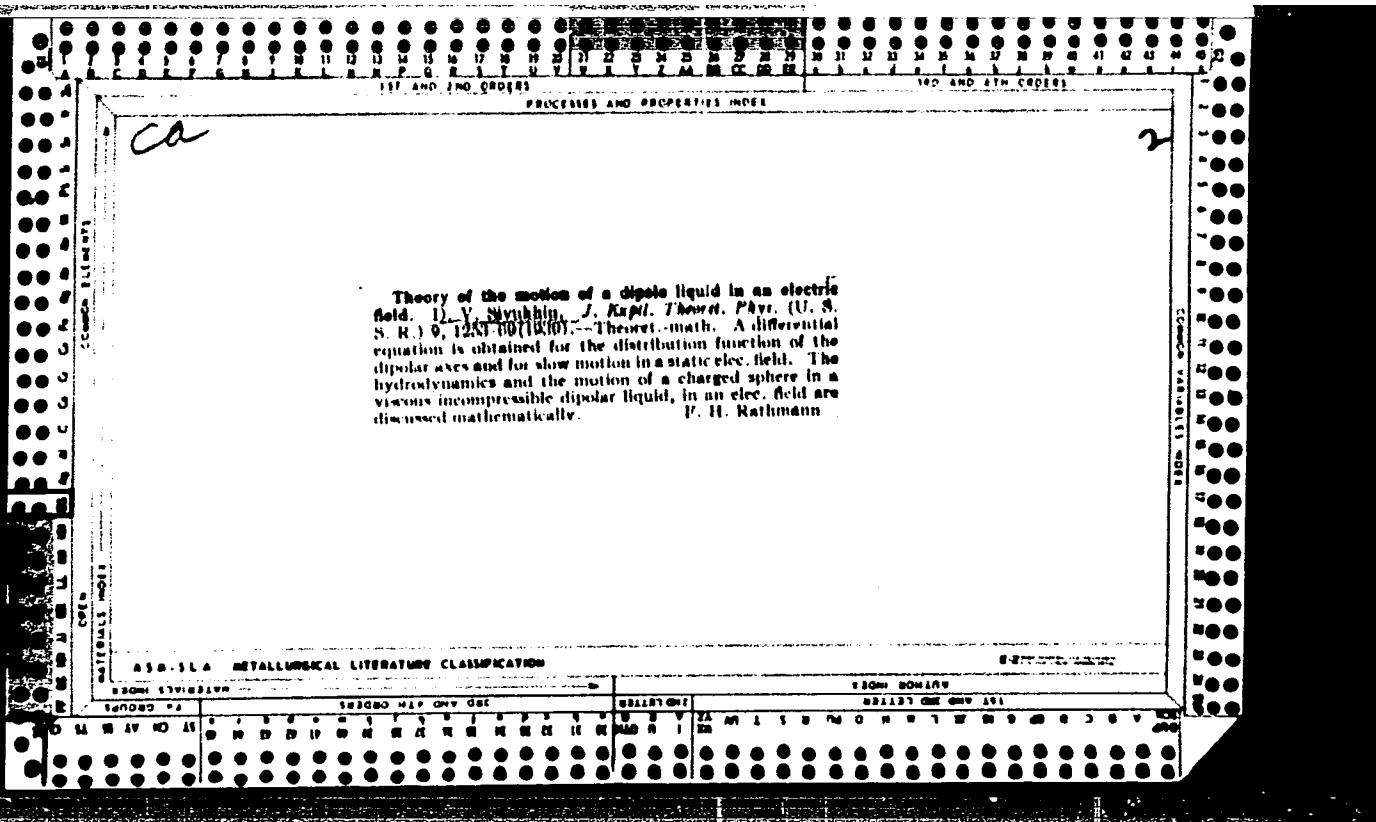
Investigating the endurance limit of shipbuilding steel to bending
on a level plane together with axial deformation. Trudy LKI no.29:
221-224 '59. (MIRA 14:7)

1. Leningradskiy korablestroitel'nyy institut, korablestroitel'nyy
fakul'tet.
(Plates, Iron and steel--Testing)

DUNAYEVA, E.M.; SIVOVIA, T.A.

Rheo-encephalographic, electroencephalographic, and clinical study on patients with cervical osteochondrosis with disorders of higher visual function. Zhur. nevr. i psikh. 65 no.9:1281-1285 '65.
(MIRA 18:9)

1. TSentral'nyy nauchno-issledovatel'skiy institut ekspertizy trudosposobnosti, Moskva.



SIVUNIN, D. V.

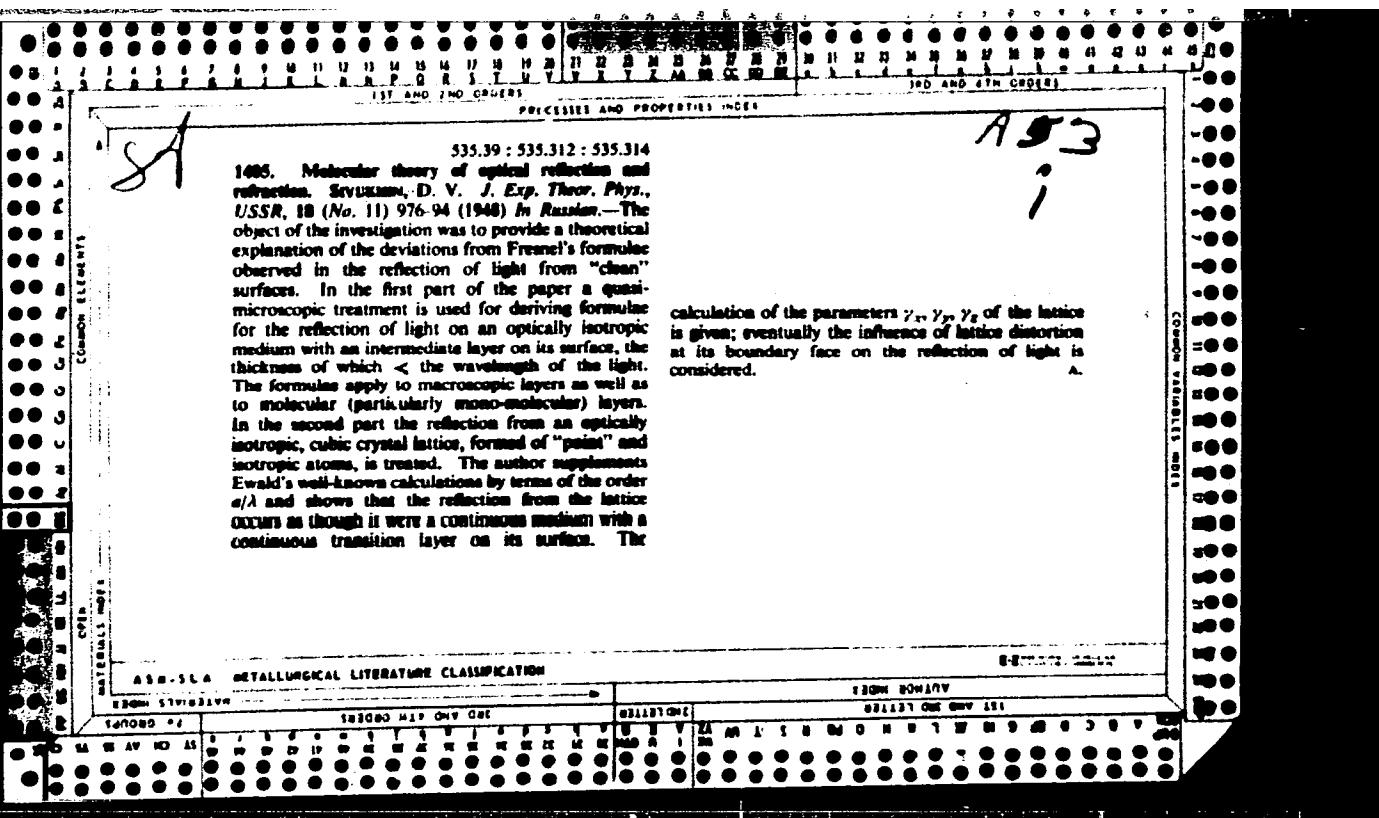
"Contribution to the Theory of the Motion of a Dipole Liquid in an Electric Field,"
Zhur. Eksper. i Teoret. Fiz., 9, No. 10, 1939;

"The Thermal Effect of an Alternating Electric Field on a Suspension of Dielectric
Particles in a Liquid," ibid., 10, No. 6, 1940;

"Contribution to the Molecular Theory of Light Reflection," Dok. AN, 36, No. 8, 1942;

"Phenomenological Theory of the Transition Layer," Zhur. Eksper. i Teoret. Fiz., 13,
Nos. 9;10, 1943;

"Molecular Theory of Reflection and Refraction of Light," ibid., 18, No. 11, 1948.
Moscow Order Lenin State Univ. im. M. V. Lomonosov (Mbr., Chair Theoretical Physics,
Physics Faculty, -1940-; Mbr., -1942-c48-).



1. SIVUKHIN, D. V.
2. USSR (600)
4. Physics and Mathematics
7. Molecular Optics, M. V. Vol'kenshteyn. (Moscow-Leningrad, State Technical Press, 1951). Reviewed by D. V. Sivukhin, Sov. Kniga, No. 2, 1952.
9. [REDACTED] Report U-3081, 16 Jan 1953, Unclassified.

CA

2

Elliptical polarization in the reflection of light from liquids
D. V. Sivukhin, *Zhur. Eksppl. Fiz.*, 21, 367-76
(1951). The case in which there is a unimol. transition
layer on the surface is treated theoretically. Good agree-
ment is found with expt. when it is assumed that this layer
consists of anisotropic mols. oriented with their axes of max.
polarizability perpendicular to the surface C. E.

SIVUKHIN, D. V.

USSR/Physics - Polarization

Feb 52

"Elementary Theory of Monomolecular Transitional Layer and Elliptic Polarization of Light Reflected from Fluids," D. V. Sivukhin, Chair of Optics

"Vest Moskov U, Ser Fiz, Mat, i Test Nauk" No 1,
pp 63-73

Author interprets phys meaning of Fresnel formulas for reflection of monochromatic light, inducing secondary light waves from mols. He discusses suggestion by L. I. Mandelshtam on elliptic polarization of light reflected from a liquid surface. Received 6 Jul 50.

242T101

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550920014-4

SIVAKHIN, D.V.

Direction of Plane Board Written by a Speci-
al Cavalry, D. V. Sivakhin, 2nd Lt., USA
Jan.-June, 1945, pp. 82-83

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APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550920014-4"

SIVUKHIN,D.V.

Diffraction of two-dimensional sound waves on spherical cavity.
Akust. zhur. 1 no.1:78-88 Ja-Mr '55. (MIRA 8:9)

1. Institut fizicheskikh problem AN SSSR im. S.I.Vavilova,
Moskva.
(Sound waves)

SIVUKHIN, D. V.

51-4-1/26

AUTHOR: Sivukhin, D. V.

TITLE: The Principle of Superposition and Theory of Dispersion.
(Printsip superpozitsii i teoriya dispersii.)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.III, Nr.4,
pp. 297-307. (USSR)

ABSTRACT: A theoretical paper. The author begins by quoting Maxwell's macroscopic electromagnetic equations for non-magnetic dielectrics and metals. He assumes that the principle of superposition of displacements and velocities of electric charges under the action of several electromagnetic fields is obeyed. This principle holds only for fields which are small compared with the internal fields in atoms and molecules. The author discusses effects of an electric pulse of infinitesimal duration. Assuming that the medium is isotropic, and excluding the anomalous skin-effect in metals, expressions for polarization and conduction current density, at time θ after the pulse, are obtained. The discussion is

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The Principle of Superposition and Theory of Dispersion.

electric pulse disperses completely after a sufficiently long time because of dissipative properties of the medium. At infinitely large real values of ω permittivity is equal to unity, in agreement with the physical observation that at very high frequencies the applied field ceases to excite electrons and atoms of the medium. One section of the present paper deals with application of the theory to a dispersing gaseous medium consisting of classical oscillators. The usual formula for permittivity (Eq.20), in terms of oscillator density, mass and charge of the vibrating particles, is obtained for this gas. Theory of dispersion is extended to complex values of frequency ω . For such values of frequency the applied fields are harmonic oscillations in time, but their amplitudes either exponentially increase or exponentially decrease with time. The static value of electrical conductivity is shown to be an essentially positive quantity. The static permittivity is found to be greater than unity for all dielectrics. The theory developed in the present paper is finally

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SOV-109-3-6-2/27

AUTHOR: Sivukhin, D. V.

TITLE: The Mean Propagation Velocity of the Electromagnetic Energy
in Waveguides (O sredney skorosti rasprostraneniya
elektromagnitnoy energii v volnovodakh)

PERIODICAL: Radiotekhnika i Elektronika, 1958, Vol 3, Nr 6,
pp 744-749 (USSR)

ABSTRACT: The work can be regarded as an extension of the de Broglie theorem which states that the propagation velocity for the electromagnetic energy in a rectilinear waveguide of an arbitrary cross-section is equal to the group velocity. The extension consists of assuming that the waveguide is filled with a medium whose permittivity ϵ and permeability μ are dependent on frequency. It is assumed that for any medium the density of flow of the electromagnetic energy is given by the pointing vector:

$$S = \frac{c}{4\pi} [EH] \quad (1)$$

On the basis of Eq.(1) and of the Maxwell equations the density of the electromagnetic energy W in a dispersion medium can be determined by solving:

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The Mean Propagation Velocity of the Electromagnetic Energy in Waveguides

$$\frac{\partial W}{\partial t} + \text{div } S = 0 \quad (2)$$

from which it follows that W can be expressed by Eq.(3). For the case of a plane, monochromatic wave, the average propagation velocity is given by:

$$v_p = \frac{\bar{S}}{\bar{W}} = \frac{d\omega}{dk} = v_g \quad (6)$$

from which it follows that the velocity is equal to the group velocity; \bar{S} and \bar{W} are the energy flow density and the energy density respectively of the electromagnetic wave. In the case of a dispersion medium, that is, when the waveguide is filled with a medium whose ϵ and μ are frequency dependent, it can be assumed that the propagating wave is as

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The Mean Propagation Velocity of the Electromagnetic Energy in Waveguides

given by Eqs.(7). The Maxwell equations are in the form of Eqs.(8), from which it follows that all the field components can be expressed by the component E_z , where E_z can be obtained from Eq.(11). The average quantity of energy passing through the waveguide in a unit time can be calculated from Eq.(17). On the other hand, the average energy per unit length of the waveguide is expressed by Eq.(19). The average propagation velocity of the energy along the waveguide is obtained by dividing Eq.(17) by Eq.(19), and this is in the form:

$$v_g = \frac{c^2}{v_t} \frac{1}{\epsilon\mu \left(1 + \frac{\omega}{2\epsilon\mu} \frac{d(\epsilon\mu)}{d\omega} \right)} \quad (20)$$

From this equation it is seen that the propagation velocity is equal to the group velocity which is expressed by Eq.(12).

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The Mean Propagation Velocity of the Electromagnetic Energy in Waveguides

Eq.(20) was derived for the waves of the electric-type, but it is also valid for the magnetic-type waves. There are no figures, and 7 Soviet references.

SUBMITTED: December 13, 1956

1. Electromagnetics - Energy 2. Electromagnetics - Velocity
3. Waveguides - Properties 4. Mathematics - Applications

Card 4/4

SIVUKHIN, D. V.

51-4-2/26

AUTHOR: Sivukhin, D. V.

TITLE: On the Energy of the Electromagnetic Field in Dispersing Media. (Ob energii elektromagnitnogo polya v dispergiruyushchikh sredakh.)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.III, Nr.4,
pp. 308-312. (USSR)ABSTRACT: A theoretical paper. Density of the electromagnetic energy in a non-absorbing, dispersing, isotropic medium was first obtained by S. M. Rytov and F. S. Yudkevich (Ref.1) by a lucid physical treatment of the subject. The mathematical side of the treatment by the latter two authors is rather complicated. An elementary proof by M. L. Levin (Ref.2) deals with a special case only. The present author deals with the problem by using permittivity $\epsilon(\omega)$ and permeability $\mu(\omega)$ with the complex values of the argument ω . It is sufficient to consider points of ω which lie in the lower half-plane $\omega'' < 0$. The author shows that Poynting's vector $S = \frac{c}{4\pi} [EH]$ (Eq.1), where

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51-4-2/26

On the Energy of the Electromagnetic Field in Dispersing Media.

with such properties are not known. It is not yet
clear whether they could exist even in principle.
There are 4 Slavic references.

SUBMITTED: December 14, 1956.

AVAILABLE: Library of Congress.

Card 3/3

GINZBURG, Vitaliy Lazarevich; LEVIN, Lev Mikhaylovich; RABINOVICH, Matvey Samsonovich; SIVUKHIN, Dmitriy Vasil'yevich; CHETVERIKOVA, Yelizaveta Sergeyevna; LIVSHITS, B.L., red.; GAVRILOV, S.S., tekhn.red.

[Collection of problems for the general course in physics] Sbornik zadach po obshchemu kursu fiziki. Pod red. D.V.Sivukhina. Izd. 2., perer. i dop. Moskva, Gos.izd-vo fiziko-matem.lit-ry. Pt.2. [Optics, molecular physics, and thermodynamics] Optika. Molekularnaia fizika i termodinamika. Atomnaia fizika i fizika iadra. (MIRA 13:10) 1960. 366 p. (Physics--Problems, exercises, etc.)

ACCESSION NR: AT4035149

S/3041/63/000/001/0007/0097

AUTHOR: Sivukhin, D. V.

TITLE: Drift theory of motion of a charged particle in an electro-magnetic field

SOURCE: Voprosy* teorii plazmy*, no. 1, 1963, 7-97

TOPIC TAGS: charged particle motion, charged particle trajectory, particle optics, drift electromagnetic field, electrodynamics

ABSTRACT: The article is devoted essentially to the motion of charged particles in electromagnetic fields, neglecting in the first approximation small and fast vibrations of the particle about its trajectory of smooth motion. The drift equations obtained are suitable for relativistic velocities but their form is relativistically non-covariant. The starting point of the theory is the motion of a charged particle in a constant homogeneous magnetic field, which is

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ACCESSION NR: AT4035149

regarded as the zeroth approximation. The section headings are: 1. Motion of a charged particle in a constant homogeneous magnetic field. 2. Motion of leading center (center of Larmor circle). 3. Origin of drifts. 4. Smoothing and averaging of quantities containing rapidly oscillating components. 5. Complete system of equations of motion in the drift approximation. 6. More exact system of equations of motion in the drift approximation. 7. Derivation of some auxiliary formulas. 8. Derivation of consistent system of equations of motion in the drift approximation. 9. Another approach to the equation of motion of the leading center. 10. Examples. 11. Drift integrals of motion in constant electric and magnetic fields. 12. Liouville theorem in the drift approximation. 13. Generalization of the drift theory to the case of strong transverse electric fields.
Orig. art. has: 14 figures and 281 formulas.

ASSOCIATION: None

Card 2/3

ACCESSION NR: AT4035149

SUBMITTED: 00

DATE ACQ: 07May64

ENCL: 00

SUB CODE: NP, EM

NR REF SOV: 013

OTHER: 005

Card 3/3

1 2346-66 EWT(1)/ETC/EPE(n)-2/EWG(m)/EPA(w)-2 IJP(c) AT
ACCESSION NR: AT5021031 UR/3041/64/000/004/0081/0187

AUTHOR: Sivukhin, D. V. 44, 55 56
TITLE: Coulomb collisions in a completely ionized plasma 21, 44, 55 B+1
SOURCE: Voprosy teorii plazmy, no. 4, 1964, 81-187
TOPIC TAGS: ionized plasma, plasma dynamics, Coulomb collision, Coulomb field, Debye length, collision integral, kinetic equation, mathematic physics

ABSTRACT: This paper is devoted to an exposition of the theoretical treatment in the collision approximation of a completely ionized plasma, in which ionization and recombination play no role. The treatment is detailed and self-contained; the paper not only provides an excellent introduction to the techniques and limitations of the collision approximation, but it also presents several important results obtained prior to 1960 by this method. The dynamics of collisions is developed and the concept of cross section is introduced. The average rate of change of the energy and momentum of a test particle moving in a field of stationary particles is calculated. The Rutherford cross section is then introduced and the resulting divergence is discussed. The divergence is removed by an arbitrary cutoff procedure leading to the appearance of the Coulomb logarithm. The equations for the

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energy and momentum change of a test particle are generalized to the case in which the field particles move and have a velocity distribution, and the analogy with electrostatics, pointed out and exploited by Rosenbluth, MacDonald, and Judd (Phys. Rev., 107, 1, 1957), is developed. The Debye-Hückel theory is developed in detail and the selection of the Debye radius as the cutoff length for the Coulomb force is discussed; although the conceptual difficulties here are by no means resolved, they are not passed over in silence. The Coulomb logarithm is calculated classically and quantum mechanically in the Born approximation, and an expression for it is obtained by interpolation for temperatures at which neither approximation is valid. The energy exchange between a test particle and a Maxwell distributed plasma is calculated, and power series and asymptotic expansions are given for the resulting error functions. The critical velocity at which there is no energy exchange with a given plasma component is calculated and tabulated for a variety of conditions. The relative roles in energy exchange with particle beams of the electron and ion components is discussed. Unfortunately, the high energy ions produced in a thermonuclear reaction act mainly to heat the electrons of the plasma. Temperature equilibrium in a two-component plasma is discussed and it is shown that a quasi-equilibrium state in which the ion and electron temperatures are different can persist for a long time. The transverse momentum change of a

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test particle moving through a plasma is discussed further. The range of a fast ion is calculated and it is shown that the deceleration is due mostly to interaction with the electrons of the plasma. Relaxation times are calculated for longitudinal and lateral acceleration of test particles (the lateral relaxation time is the time required for the test particle momentum vector to rotate 90°). The relaxation times are calculated separately for test electrons and test ions interacting separately with the electron and ion components of the plasma. The corresponding mean free paths are calculated and the vagueness of the concept of mean free path in the presence of long-range forces is pointed out. The phenomenon of runaway plasma electrons in an external electric field (R.G.Giovanelly, Phil. Mag., 40, 206, 1949) is discussed in considerable detail. After all these discussions based on test particle behavior, the Fokker-Planck equation is derived. The force is separated into a steady component and a stochastic component due to collisions. Close collisions are ignored and the current density in momentum space due to distant collisions is expressed in terms of a momentum-space diffusion tensor and dynamic friction constant, expressions for which in terms of the distribution function are derived. The Rutherford cross section and the cutoff procedure are introduced and the current density in momentum space is transformed into Landau's collision integrals. There is no adequate discussion of the separation of the Coulomb interaction into a self-consistent field and a

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collision term. The conditions for the validity of Landau's collision integrals in a strong magnetic field are discussed. In ordinary magnetic mirror systems the collision integrals are valid for ion-ion collisions but not for collisions involving electrons. The diffusion approximation is discussed and is applied to the runaway electron problem. In this approximation one replaces the momentum space diffusion tensor and dynamic friction coefficient by suitable functions of the velocity, which do not involve the distribution functions. The kinetic equation employed by A.V.Gurevich (Zh. eksperim. i teor. fiz., 39, 1296, 1960) to treat the runaway electron problem is derived and an error in the equation actually used by Gurevich is pointed out and corrected. The kinetic equation is applied to the problem of energy exchange between different plasma components and the same result is obtained as was previously derived from test particle behavior considerations. The escape of ions from a magnetic mirror system as a result of collisions is discussed in considerable detail. It is shown that the entrapment time depends only weakly on the mirror ratio; it is therefore unnecessary to build magnetic mirror systems with large mirror ratios. The dd and dt reactions are discussed and it is concluded that to confine a plasma in a mirror system long enough for it to react, the ion temperature would have to be of the order of the energy of the reaction products. Even if the instabilities could be overcome, therefore, the magnetic mirror trap would not provide a suitable vessel

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ACCESSION NR: AT5021031

for a self-sustained thermonuclear reaction. The last 16 pages of the article are devoted to a discussion of the divergences stemming from the long range of the Coulomb forces and the significance of the means adopted for removing them. An alternative method to cutting off the range of the Coulomb force is developed. The result of this calculation is the appearance in the Coulomb logarithm of an arbitrary collision time in place of an arbitrary cutoff length. Taking the limiting collision time equal to the reciprocal of the Langmuir frequency gives the same result as cutting off the Coulomb field at the Debye radius. Orig. art. has: 464 formulas, 14 figures, and 4 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: ME

NO REF Sov: 016

OTHER: 007

QC
Card 5/5

L 13042-66	EWT(m)/EWA(m)-2	DM
ACC NR:	AP6001791	SOURCE CODE: UR/0089/65/019/006/0510/0517
AUTHOR:	<u>Sivukhin, D. V.</u>	
ORG:	None	
TITLE: Concerning the feasibility of self-maintaining thermonuclear reaction in a magnetic-mirror trap		
SOURCE: Atomnaya energiya, v. 19, no. 6, 1965, 510-517		
TOPIC TAGS: controlled thermonuclear reaction, plasma confinement, magnetic mirror machine		
ABSTRACT: The author calculates the energy balance in several variants of a thermonuclear reactor in which magnetic-mirror traps are used. The investigation is aimed at determining whether it is possible to obtain in a magnetic-mirror trap a self-maintaining thermonuclear reaction in spite of the continuous escape of particles through the magnetic mirrors. The analysis is based on calculations of the average confinement time of the ion in the trap, using a formula previously derived by the author (Voprosy teorii plazmy [Problems of plasma theory], no. 4, 1964, p. 81). The estimates of the confinement time are made for four types of reactors operating with pure deuterium, a mixture of equal parts of deuterium and tritium, a mixture of half deuterium and an equi-		
Card	1/2	UDC: 621.039.6:533.9 2

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ACC NR: AP6001791

librium concentration of He^3 and tritium, and an equilibrium mixture of D, T, and He^3 . The analysis consists in determining the energy balance for the different variants, the burnup ratio, the mirror ratio, and several other characteristic quantities which can serve as criteria for the efficiency of a thermonuclear reactor. It is shown that in all four variants only a small fraction of the ions can react in the trap, and that the overwhelming majority of the ions will escape through the mirrors before producing the thermonuclear reaction. Estimates of the average energy released in the thermonuclear reactor per reacting particle shows that even if the mirror ratio is greatly improved (by a factor of 1,000) the required ion energies still are on the order of several hundred keV, so that there is every reason to assume that a self-maintaining thermonuclear reaction is impossible in a magnetic-mirror machine. Author is deeply grateful to M. A. Leontovich, L. A. Artsimovich, V. I. Kogan, and I. N. Golovin for a discussion of problems touched upon in the article. Orig. art. has: 16 formulas and 4 tables.

[02]

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SUB CODE: 20/ SUBM DATE: 20Feb65/ ORIG REF: 003/ OTH REF: 003
ATD PRESS: 4181

Cord

2/2

L 26534-66 EPF(n)-2/EWT(1)/ETC(m)-6 IJP(c) WW

ACC NR: AP6011510

SOURCE CODE: UR/0382/66/000/001/0035/0042

82
80

B

AUTHOR: Sivukhin, D. V.

ORG: none

TITLE: On conical refraction of magnetic sound waves

SOURCE: Magnitnaya gidrodinamika, no. 1, 1966, 35-42

TOPIC TAGS: acoustic refraction, magnetohydrodynamics, optic crystal, phase velocity, acoustic speed, sound wave, magnetic field

ABSTRACT: The author discusses a phenomenon analogous to the internal conical refraction occurring in optical biaxial crystals when the wave normal is directed along one of the optical axes. In the case of magnetic-sound waves a similar phenomenon occurs if they propagate in an ideally conducting liquid placed in a constant homogeneous magnetic field, when the Alfvén velocity is equal to the velocity of sound. A geometrical connection is established between the surface of the normals (geometric locus of the ends of the segments whose lengths are equal to the phase velocities of the magnetic sound waves, drawn from an arbitrary point) and the ray surface (geometric locus of the ends of the group-velocity vectors drawn in all possible directions from the same point). This makes it possible to plot the ray surface from the known normal surface, and vice versa. An analytic equivalent of the geometric construction is also presented. It is shown that the analog of internal conical refraction in biaxial crystals occurs when the wave propagating along the magnetic field is

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UDC: 538.4

L 26534-66

ACC NR: AP6011510

2

quasi-plane and its corresponding waves form a cone with apex angle $53^{\circ}08'$. The ray surface can also be defined as the envelope of the plane wave front propagating per unit time from the origin in different directions. Various geometric properties of the relation between these surfaces, for different ratios of the Alfvén velocity (a) to the speed of sound (c), are briefly discussed. The discontinuity occurring at the points $a = c$, is analyzed by considering the propagation of magnetic sound waves through two media, in which one $c = a$ and in which the other c and a vary continuously, and it is shown that on entering the medium with $c = a$ a quasi-plane wave sculd be refracted in such a way that the beam turns into a cone with axis along the magnetic field and aperture angle $53^{\circ}08'$. The features of the phenomenon for different ratios a/c are discussed. The author thanks M. A. Leontovich for a discussion of problems discussed and T. F. Volkov for pointing out literature pertaining to the same question. Orig. art. has: 6 figures, 15 formulas, and 1 table.

SUB CODE: 20/ SUBM DATE: 25Oct65/ ORIG REF: 001/ OTH REF: 004

Card 2/2 1 C

BUTOMA, B.Ye.; SOKOLOV, P.A.; BALAYEV, D.N.; SERGEYEV, N.M.; SHUMSKIY, K.A.; TYAPKIN, M.Ya.; SMIRNOV, V.A.; PIROGOV, N.I.; FEDOROV, N.A.; GOLYASHKIN, G.S.; KUZ'MIN, A.P.; AKULINICHIEV, V.P.; brigadir; GORBENKO, Ye.M.; BYSTREVSKIY, L.M., inzh.; STEPANOV, P.S., brigadir; Us, I.S., brigadir-sudosborshchik, deputat Verkhovnogo Soveta SSSR; USTINOV, P.D., slesar'-sborshchik; FINOGENOVA, N.Ya., tokar'; LERNER, M.; ALEKSEYEV, R.Ye.; SIVUKHIN, K., starshiy master; OSTAF'YEV, A.I.; TROFIMOV, B.A., inzh.: KOVRYZHIN, V.F., inzh.; MOISEYEV, A.A., prof.; GOLUBEV, N.V.; MOGILEVICH, V.I.; ANDRYUTIN, V.I.; ANDRIYEVSKIY, M.I.; MATSKEVICH, V.D., dots.

Shipbuilders prepare for the 21st Extraordinary Congress of the CPSU.
(MIRA 12:3)
Sudostroenie 25 no.1:1-25 Ja '59.

1. Predsedatel' Gosudarstvennogo komiteta Soveta Ministrov SSSR po sudostroyeniyu, ministr SSSR (for Butoma).
2. Nachal'nik upravleniya sudostroitel'noy promyshlennosti Lensovnarkhoza (for Sokolov).
3. Direktor Baltiyskogo sudostroitel'nogo zavoda im. S.Ordzhonikidze (for Balayev).
4. Nachal'niki tsekhov Baltiyskogo sudostroitel'nogo zavoda im. S. Ordzhonikidze (for Sergeyev, Shumskiy).
5. Nachal'nik mehanicheskogo tselka Baltiyskogo sudostroitel'nogo zavoda im. S. Ordzhonikidze (for Tyapkin). (Continued on next card)

BUTOMA, B.Ye.---(continued) Card 2.

6. Brigada kommunisticheskogo truda Baltiyskogo sudostroitel'nogo zavoda im. S. Ordzhonikidze (for Smirnov).
7. Glavnyy inzhener Admiralteyskogo sudostroitel'nogo zavoda, Leningrad (for Pirogov).
8. Glavnyy inzhener sudostroitel'nogo zavoda im. A.A. Zhdanova (for Fedorov).
9. Nachal'nik elektrodnogo tsekha Sudostroitel'nogo zavoda im. A.A. Zhdanova (for Golyashkin).
10. Nachal'nik tsekha kommunisticheskogo truda sudostroitel'nogo zavoda im. A.A. Zhdanova (for Kuz'min).
11. Malyarnyy tsekhanoy sudostroitel'nogo zavoda im. A.A. Zhdanova (for Akulinichev).
12. Glavnyy inzhener Nikolayevskogo sudostroitel'nogo zavoda im. I.I. Nosenko (for Gorbenko), Nikolayevskiy sudostroitel'nyy zavod im. I.I. Nosenko (for Bystrevskiy, Us, Ustinov, Finogenova).
14. Slesarno-shorochnaya brigada Nikolayevskogo sudostroitel'nogo zavoda im. I.I. Nosenko (for Stepanov).
15. Zamestitel'nachal'nika konstruktorskogo byuro sudostroitel'nogo zavoda "Krasnoye Sormovo" (for Lerner).
16. Glavnyy konstruktor konstruktorskogo byuro sudostroitel'nogo zavoda "Krasnoye Sormovo" (for Alekseyev).
17. Sudostroitel'nyy zavod "Krasnoye Sormovo" (for Sivukhin).
18. Direktor sudostroitel'nogo zavod "Leninskaya kuznitsa" (for Ostaf'yev).
19. Sekretar' partkoma TSentral'nogo nauchno-issledovatel'skogo instituta (for Trofimov). (Continued on next card)

BUTOMA, B.Ye.--(continued) Card 3.

20. Predsedatel' Leningradskogo oblastnogo pravleniya Nauchno-tehnicheskogo otdela sudostroitel'noy promyshlennosti (for Moiseyev).
21. Glavnyye inzhenerы Konstruktorskogo byuro (for Golubev, Andryutin).
22. Glavnyy konstruktor Konstruktorskogo byuro (for Mogilevich).
23. Nachal'nik TSentral'nogo tekhniko-konstruktorskogo byuro (for Andriyevskiy).
24. Zamestitel' direktora Leningradskogo korabestroitel'nogo instituta po uchebnoy chasti (for Matskevich).

(Shipbuilding)

KRYUKOV, Kh.N.; SIVUKHIN, V.I.

Machine for determining the fineness of coal milling.
Sbor.rats.predl.vnedr.v proizv. no.1:45-46 '61. (MIRA 14:7)

1. Magnitogorskiy metallurgicheskiy kombinat.
(Testing machines)

sov/58-59-7-14802

Translation from: Referativnyy Zhurnal Fizika, 1959, Nr 7, p 33 (USSR)

AUTHORS: Maksimov, B.I., Dubrovka, V.M., Sivulich, I.M., Tsibere, I.M.

TITLE: Some Antiparticle Processes

PERIODICAL: Dokl. i soobshch. Uzhgorodsk. un-ta, 1958, Nr 2, p 29

ABSTRACT: The authors calculated the cross sections of a number of processes involving the formation of a particle-antiparticle pair (proton-antiproton, electron-positron, muon-antimuon) near the reaction threshold from the field coupling constants in a first nonvanishing approximation.

Yu.L. 

Card 1/1

SIVYAKOV, A.A.; ANDRYUSHIN, Yu.N. (Ivanovo)

Case of incomplete bifurcation of the aortic arch with duplication
of the number of its large vessels. Arkh. pat. 21 no.10:60-62 '59.
(MIRA 14:8)

1. Patologoanatomiceskogo otdeleniya 4-y gorodskoy bol'nitsy
(glavnyy vrach N.A.Kurbatova).
(AORTA--ABNORMALITIES AND DEFORMITIES)

SIVYAKOV, A.A.; TYURINA, A.A.; ANDRYUSHIN, Yu.N.

Case of total transposition of the great vessels with severe
hypoplasia of the aortic arch. Pediatrilia 37 no.7:81-82
J1 '59. (MIRA 12:10)

1. Iz patologoanatomiceskogo otdeleniya 4-y gorodskoy bol'nitsy
g.Ivanovo (glavnyy vrach I.A.Kurbatova).
(CARDIOVASCULAR DEFECTS, CONGENITAL, case reports,
total transposition of great vessels with
aortic arch hypoplasia (Rus))

ANDRYUSHIN, Yu.N.; SIVYAKOV, A.A.

Ascariasis of the pancreas. Sov. med. 25 no.3:129-130 Mr '61.
(MIRA 14:3)

1. Iz patologoanatomiceskogo otdeleniya 3-y gorodskoy bol'nitsy
(glavnnyy vrach V.I.Fedorov) g.Ivanova.
(ASCARIDS AND ASCARIASIS) (PANCREAS--DISEASES)

SIVYAKOV, A.A.; TYURINA, A.A. (Ivanovo (obl.) pr. Stalina, d.70, kv.9);
ANDRYUSHIN, Yu.N.

Strangulated hernia in ectopia vesicae. Vest.khir. no.5:137-139
(MIRA 15:1)
'61.

1. Iz patologoanatomiceskogo otdeleniya detskoy infektsionnoy
bol'nitsy No.3 (gl. vrach - O.I. Lebedeva) g. Ivanova.
(BLADDER--HERNIA) (BLADDER--DISPLACEMENT)

BERASHEVICH, N.K.; SIVYAKOV, A.A.; ANDRYUSHIN, Yu.N.

Acute pancreatitis as a complication of toxicosis in the
second half of pregnancy. Akush. i gin. no.1:121-123 '63.
(MIRA 17:6)

1. Iz rodil'nogo doma No.3 Ivanova (glavnnyy vrach N.K. Berashevich).

SHEFTEL¹, B.T.; SIVYAKOV, K.M.

Modeling the corrugation profile of a rolling-bearing
race. Stan. i instr. 34 no.10:37-38 0 '63. (MIRA 16:11)

PHASE I BOOK EXPLOITATION

SOW/5053

Vsesoyuznaya konferentsiya po treniyu i iznosu v mashinakh. - 3d,
1958.

Iznos i iznosostoykost'. Antifrictionnye materialy (Wear and
Wear Resistance. Antifriction Materials) Moscow, Izd-vo AN
SSSR, 1960. 273 p. Errata slip inserted. 3,500 copies printed.

(Series: Itis: Trudy, v. 1)

Sponsoring Agency: Akademiya nauk SSSR. Institut mashinovedeniya.
Responsible Ed.: M. M. Khrushchov, Professor; Ed. or Publishing
House: M. Ya. Klebanov, and S. L. Orpit; Tech. Ed.:
T. V. Polyakova.

PURPOSE: This collection of articles is intended for practicing
engineers and research scientists.

COVERAGE: The collection, published by the Institut mashinovedeniya,

AM SSSR (Institute of Machines, Academy of Sciences
USSR) contains papers presented at the III Vsesoyuznaya Kon-
ferentsiya po treniyu i iznosu v mashinakh (Third All-Union
Conference on Friction and Wear in Machines) which was held
April 9-12, 1958. Problems discussed were in 5 main areas:
1) Hydrodynamic Theory of Lubrication and Friction Bearings
(Chairmen: Ye. M. Gut Yar, Doctor of Technical Sciences, and
A. K. D'yachkov, Doctor of Technical Sciences); 2) Lubricant of
and Lubricant Materials (Chairman: O. V. Vinogradov, Doctor of
Chemical Sciences); 3) Dry and Boundary Friction (Chairmen:
B. V. Devyagin, Corresponding Member of the Academy of Sciences;
USSR, and I. V. Kruglyak, Doctor of Technical Sciences);
4) Wear and Wear Resistance (Chairman: M. M. Krushchov,
Doctor of Technical Sciences); and 5) Friction and Antifriction
Materials (Chairman: I. V. Kruglyak, Doctor of Technical
Sciences, and M. M. Krushchov, Doctor of Technical
Sciences). Chairman of the General assembly (on the first and
last day of the conference) was Academician A. A. Blagonravov.
L. Yu. Prusankov, Candidate of Technical Sciences, was scientific
secretary. The transactions of the conference were
published in 3 volumes, of which the present volume is the
first. This volume contains articles concerning the wear and
wear resistance of antifriction materials. Among the topics
covered are: modern developments in the theory and experi-
mental science of wear resistance of materials, specific data
on the wear resistance of various combinations of materials,
methods for increasing the wear resistance of certain materials,
the effects of friction and wear on the structure of materials,
the mechanism of the seizing of metals, the effect of various
types of lubricating materials on seizing, abrasive wear of a
wide variety of materials and components under many different
conditions, modern developments in antifriction materials, and
the effects of finish machining on wear resistance. Many per-
sonalities are mentioned in the text. References accompany most
of the articles.

Misharin, Yu. A., and A. V. Sivjakov, Laboratory In-
vestigation of the Antifriction Stability of Several
Materials Used in Worm Gears

170

Semenov, A. P., Problems in the Theory of the Seizing
of Metals

174

Semenov, A. P., Comparative Estimate of the Antiseizing
Properties of Materials and Their Combinations

181

3. Abrasive Wear. Wear Under Special Conditions
of Friction

7

Berzorod'ko, M. D., Wear of Steel and Bronze at High
Specific Contact Pressures in the Presence of Organic
and Nonorganic Lubricants and an Abrasive

191

Vasil'ev, A. A., V. I. Stetsenko, and Ye. A. Markovskiy,
Investigation of the Wear Resistance of Highly Durable
Cast Iron

201

Card 8/13

L 24500-66 EWT(m)/EWP(j)/T WW/JW/JWD/RM
ACC NR: AP6002167

SOURCE CODE: UR/0195/65/006/006/1117/1118

AUTHOR: Antonova, L. G.; Krasil'shchikov, A. I.; Sivyakova, R. F.; Dmitrenko, L. M.

ORG: State Scientific Research and Planning Institute of the Nitrogen Industry and
Products of Organic Synthesis (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy
institut azotnoy promyshlennosti i produktov organicheskogo sinteza)

TITLE: Potential dependence of ammonia yield on K-55 catalyst

SOURCE: Kinetika i kataliz, v. 6, no. 6, 1965, 117-118

TOPIC TAGS: nitrogen, hydrogen, ammonia, cathode polarization

ABSTRACT: In order to determine the effect of the electrochemical polarization of K-55 catalyst on the rate of ammonia synthesis, the potential of thin layers of the catalyst was measured during polarization. The experiments were carried out at 375-400°C with a nitrogen-hydrogen mixture of stoichiometric composition; the ammonia was absorbed in a 0.01 N H₂SO₄ solution and back-titrated with methyl red. The current density ranged from 0.04 to 1 μA/cm², and the potential was shifted from 0 to 6 V. A very slight increase in ammonia yield was noted as the cathode potential was raised. It is concluded that the substantial increase in ammonia yield (by a factor of 2-2.5) observed earlier by other authors when strong fields were applied to the electrode must be directly related to the influence of the fields on the catalytic reaction, and

UDC: 541.128.13.037+542.91 : 546.171.1

Card 1/2

L 24500-66

ACC NR: AP6002167

is not due to electrolysis phenomena in the glass. During polarization, only the portions of the porous catalyst electrode which are directly adjacent to the glass become partially activated. Orig. art. has: 1 figure.

SUB CODE: 07/ SUBM DATE: 03Feb65/ ORIG REF: 003/ OTH REF: 000

Card 2/2 LC

DMITRENKO, L.M.; LACHINOV, S.S.; SIVYAKOVA, R.F.

Effect of the cathodic and anodic polarization of an ammonia synthesis catalyst on its activity. Khim. i kat. 1 no. 3:379-384 S-0 '60. (MIRA 13:11)

1. Nauchno-issledovatel'skiy institut azotnoy promyshlennosti.
(Polarization (Electricity)) (Ammonia)
(Catalysts)

L 39734-65 EWT(m)/EPF(c)/EPR/EWP(t)/EWP(b) Pr-4/Ps-4 IJP(c)/RPL JD/WW/
ACCESSION NR: AP5006777 JW S/0195/65/006/001/0121/0127 21

AUTHOR: Dmitrenko, L. M.; Lachinov, S. S.; Sivyakova, R. F. 26
B

TITLE: The effect of cathode and anode polarization on the activity of a catalyst
for synthesizing ammonia. II

SOURCE: Kinetika i kataliz, v. 6, no. 1, 1965, 121-127

TOPIC TAGS: cathode polarization, anode polarization, catalyst, ammonia

ABSTRACT: It was found that during the initial moments of polarization the yield of ammonia increases in the case of cathode polarization and decreases in anode polarization. The more active the catalyst, the less is the initial effect of cathode polarization and the greater is the initial effect of anode polarization. During prolonged cathode polarization the catalyst is deactivated; with prolonged anode polarization the catalyst is activated. The accelerating effect of additives on the iron catalyst for ammonia synthesis is explained by acceleration of the acceptor stages in the electro-chemical mechanism of ammonia catalysis. It is assumed that one of the conditions for catalytic acceleration is a reduction in the concentration of chemisorbed intermediate compounds which deactivate the surface of

Card 1/2

L 39734-65

ACCESSION NR: AP5006777

the catalyst. Orig. art. has: 4 figures, 1 table.

ASSOCIATION: Gosudarstvennyy institut azotnoy promyshlennosti (State Institute of
the Nitrogen Industry)

SUBMITTED: 04Jun63

ENCL: 00

SUB CODE: GC, IC

NO REF SOV: 004

OTHER: 000

m.e.
Card 2/2

AKHIEZOV, I.G.; KHALIL'SHORIROV, A.I.; SIVYAKOV, R.F.; MIRZAEV, D.M.

Ammonia yield on a K-55 catalyst as a function of the potential.
Kin. i kat. 6 no. 61117-11118 N-D '65 (MERA 1961)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy
institut azotnoy promyshlennosti i produktor organicheskogo
sintezza. Submitted February 3, 1965.

15-57-5-7003D

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 5,
p 181 (USSR)

AUTHOR: Sivyy, V. B.

TITLE: Rhythmic Operation of the Donbas Mines /Organizatsiya
ritmichnoy raboty shakht (v usloviyakh Donetskogo
basseyna)/

ABSTRACT: Bibliographic entry on the author's dissertation for
the degree of Candidate of Economic Sciences,
presented to Khar'kovsk. inzh-ekon. in-t (Khar'kov
Institute of Economic Engineering), Khar'kov, 1956

ASSOCIATION: Khar'kovsk. inzh-ekon. in-t (Khar'kov Institute of
Economic Engineering)

Card 1/1

DERUSOV, I.S., dots.; SIVYY, V.B., inzh.

Efficient construction of an underground mine ventilation system.
Izv.vys.ucheb.zav.; gor.zhur. no.2:158-160 '60. (MIRA 14:5)

1. Khar'kovskiy inzhenerno-ekonomicheskiy institut.
(Mine ventilation)

NEZHENTSEV, V.V., inzh.; SIVYY, V.B., kand.ekon.nauk

Study of the effectiveness of the concentration of mining operations.
Izv. vys. ucheb. zav.; gor. zhur. no.11:61-65 '61. (MIRA 15:1)

1. Khar'kovskiy inzhenerno-ekonomicheskiy institut. Rekomendovana
kafedroy ekonomiki i organizatsii gornogo proizvodstva.
(Coal mines and mining)

NEZHENTSOV, Vadim Vasil'yevich; SIVY, Vladimir Borisovich; SURKOV,
Adol'f Gavrilovich; MIROSHNICHENKO, V.D., red. izd-va;
OVSEYENKO, V.G., tekhn. red.

[Economics and organization of mine haulage]Ekonomika i organi-
zatsiya shakhtnogo transporta. Moskva, Gosgortekhizdat, 1962.
(MIRA 15:9)
199 p.
(Mine haulage)

KOZHAKHMETOV, G.I., inzh.; SIVYY, V.B., dotsent

Analyzing the utilization of the carrying capacity of mine haulage sections using the theory of mass transportation. Izv.vys.ucheb.zav.;
(MIRA 18:2)
gor.zhur. 7 no.12:31-37 '64.

1.Khar'kovskiy inzhenerno-ekonomicheskiy institut. Rekomendovana
kafedroy ekonomiki i organizatsii gornogo proizvodstva.

GRIGOR'YEV, I.A.; KUZNETSOV, V.P.; SIVYY, V.B.

[Determining coal mining potentials and the efficiency of
using them] Vyjavlenie rezerfov dobychi uglia i effektivnost'
ikh ispol'zovaniia. Moskva, Nedra, 1964. 99 p.
(MIRA 18:3)

NEZHENTSEV, Vadim Vasil'yevich; SIWY, Vladimir Borisovich;
YAKOVLEV, Nikolay Aleksandrovich; MAYZEL', L.L.; kand.
ekon. nauk, retsenzent: RODINOVA, N.P., ved. red.

[Organization of rhythmic operations in mines] Organi-
zatsiya ritmichnoi raboty shakht. Moskva, Nedra, 1965.
(MIRA 16:7)
140 p.

SIVYY, V.V., kand.ekonom.nauk

Basing technical and organizational measures on the efficiency cor-relation method. Izv. vys. ucheb. zav.; gor. zhur. 6 no.7:91-95 '63.
(MIRA 16:9)

1. Khar'kovskiy inzhenerno-ekonomicheskiy institut. Rekomendovana
kafedroy ekonomiki i organizatsii gornoje preizvodstva Khar'kovskogo
inzhenerno-ekonomicheskogo instituta.

KCUBA, K.; SIXTOVA, E.; HAVRANKOVA, O.

Treatment of aphthous stomatitis. Cesk. pediat. 20 no.6:524-530
Ja'65.

1. Infekcni klinika v Praze na Bulovce (prednosta: prof. dr.
J. Prochazka, DrSc.).

SIWA, Maurycey, inz., asystent

Narrow-band filters with piezoelectric resonators. Prace Inst
teletechn 4 no.2:11-40 '60.

(MIRA 16:8)

1. Instytut Tele-i Radiotechniczny, Warszawa.

SIWA, Maurycy, mgr inz.; BOBIENSKI, Janusz, mgr inz.

Quartz filters of intermediate frequency. Prace Inst teletechn
5 no.4:79-85 '61.

SIWA, Waldemar, mgr inż.

Production course management in machine building works producing
in small series. Techn lotn 18 no.8:205-207 Ag '63.

SIWCZYK, M., inz.

"Technology of electric-spark hardening of instruments and machine parts" by G.P. Iwanow. Reviewed by M. Siwczyk. Mechanik 34 no.10:534 '61.

Siwezyński, Z.

✓ Defecosaturation of dissolved second sugar powder in the Chybie refinery. J. Podhorodecki and Z. Siwezyński. *Gaz Cukrownicza* 50, 20-1(1964); *Sugar Ind. Abstr.* 16, 84.— Instead of affining and centrifuging, the sugar powder of purity 91.2 (89.8-93), color 109.1° St. (84-148°), was dissolved in sweet water to 44° Brix, heated to 85°, defecated with 2.8% CaO (on juice), std. to 0.04% CaO alky., and filtered. The liquor then had purity 92.4° and color 24.3° St., indicating 76.4% color removal and 13.6% nonsugars removal. The liquor was used for melting affined sugars from 2nd and 3rd massecuites, and this syrup was filtered through partly used active C and boiled in admixt. with the run-off from the 1st massecuite. These methods have been found to be an improvement on previous processes.

K. L. C.

2

SIWECK, J.

Overseas. p. 3.
(Rolnik Spoldzielca, Warsawa, Vol. 9(i. e; 10)no. 18, May 1957.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

SINECKA, J.

Use of radioactive isotopes for the study and control of technological processes
in the radio industry in Russia, p. 329.
(TELE-RADIO. Vol. 2, no. 7, July 1957. Warszawa, Poland)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 12, Dec. 1957.
Uncl.

SIWECKA, J.

A colorimetric method of determining small quantities of bromine in selenium for rectifiers. p. 1001.

CHEMIA ANALITYCZNA. (Komisja Analityczna Polskiej Akademii Nauk i Naczelnego Organizatora Techniczna) Warszawa, Poland. Vol. 3, No. 5/6, 1958

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 8, August 1959

UNCL.

100-24
S/194/62/000/005/042/066
D201/D301

9,4320

AUTHOR:

Siwecka, Janina

TITLE:

A thermistor for stabilizing the operating point of transistor circuits

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 3, 1962, abstract 3-4-49ye (Instytut Tele-i Radio techniczny. Polish patent cl. 21a, 77, no. 44476, 20.05.61)

TEXT: The patent is taken out for a thermistor made of a material having a high stability of its electrical parameters. The material is a solid solution of a 1:1 ratio of nickel and zinc ferrites ($\text{NiO} \cdot \text{Fe}_2\text{O}_3 - \text{ZnO} \cdot \text{FeO}_3$). The basic material for its fabrication is ferric oxide Fe_2O_3 , zinc oxide ZnO and nickel carbonate NiCO_3 . The technological process consists of several grinding stages, mixing and sintering. Forming is carried out with a plasticizer. The crystallization is carried out for 3 hours at a temperature of about

Card 1/2

Caru 2/2

i2978

S/058/62/000/011/055/061
A160/A101

AUTHOR: Siwecka, Janina

TITLE: A thermistor for limiting the filament current in tube receivers
and the method of its production

PERIODICAL: Referativnyy zhurnal, Fizika, no. 11, 1962, 19, abstract 11-4-37n P.
(Pol. pat., cl. 21a⁴, no. 44986, October 16, 1961)

TEXT: A solid solution of nickel ferrite $\text{NiO}\cdot\text{Fe}_2\text{O}_3$ and of zinc ferrite $\text{ZnO}\cdot\text{Fe}_2\text{O}_3$ in an approximate ratio of 1 : 4 without additional admixtures is proposed as thermistor material. Serving as raw materials are Fe_2O_3 , NiO and ZnO which are mixed in amounts of 50 - 51, 10 and 40 - 39 mol.%. The technology of ferrites is simple. Thermistors are obtained by molding with a plasticizer (a 5% aqueous solution of polyvinyl alcohol). The silver-tipped contacts are applied in the form of a paste, and are then annealed. The paste contains 60 weight % of silver carbonate, 39 weight % of a 25% rosin solution in turpentine, and 1 weight % of boric anhydride.

N. S.

[Abstracter's note: Complete translation]

Card 1/1

SIWECKA, Janina, mgr, adiunkt

Studies on thermistors made from two types of semiconductive material. Prace Inst teletechn 6 no.3:57-82 '62.

1. Kierownik pracowni chemii nieorganicznej i analitycznej Instytutu Tele- i Radiotechnicznego, Warszawa.

SIWECKA, Janina, mgr

Stability tests of some new types of thermistors. Prace
Inst teletechn 8 no.1:73-88 '64.

SIWECKI, J.

National Electric Apparatus Industry at the 26th Poznan International Fair.

P. 141 (WIADOMOSCI ELEKTROTECHNICZNE) (Warsaw, Poland) Vol. 17, no.6, June 1957

SO: Monthly Index of East European Accessions (EEAI) LC Vol. 7, No. 5. 1958.

KAMIENSKI, B.; MARCZEWSKA-CHROMOWA, H.; SIWEK, B.

Electric surface potential and surface tension of aqueous solutions
of phthalic acid. Bul chim PAN 9 no. 5: 355-360 '61.

1. Department of Physical Chemistry and Electrochemistry, Jagiellonian
University, Cracow. Presented by B. Kamienski.

(Solutions) (Surface chemistry) (Phthalic acid)

KAMIENSKI, B.; SIWEK, B.

Influence of 4-chlorophthalic acid on the surface potential and surface tension of aqueous solutions at different pH. Bul chim PAN 10 no.8: 439-444 '62.

1. Department of Physical Chemistry and Electrochemistry, Jagellonian University, Krakow, and Laboratory of Physical Chemistry of Surface Phenomena, Krakow, Institute of Physical Chemistry, Polish Academy of Sciences.

KAMIENSKI, B.; SIWEK, B.

Electric surface potential and surface tension of aqueous
solutions of tetrachlorophthalic acid. Bul chim PAN 12
no. 2: 133-136 '64

1. Laboratory of Physical Chemistry of Surface Phenomena,
Krakow, Institute of Physical Chemistry, Polish Academy
of Sciences and Department of Physical Chemistry and
Electrochemistry, Jagiellonian University, Krakow.
Presented by B. Kamienski.

KAMIENSKI, B.; SIWEK, B.

Influence of the structure of para-and metaisomers of fluoroaniline
on the electric surface potential and surface tension in aqueous
solutions. Bul chim PAN 12 no.8:555-559 '64.

1. Laboratory of Physical Chemistry of Surface Phenomena, Krakow,
Institute of Physical Chemistry of the Polish Academy of Sciences.
Submitted June 6, 1964.

ACZEL, J.(Debrecen); GOLAB, Stanislaw (Krakow); KUCZMA, M. (Krakow);
SIWEK, E. (Krakow)

The double relation as the solution of a functional equation. *Annales
Pol. math.* 9 no.2:183-187 '60.
(EEAI 10:5)
(Functional equations)

GOLAB, S.; SIWEK, E. (Krakow)

On the transitivity domains of a transformation group. *Annales pol
math* 10 no.3:209-216 '61.

(Groups, Theory of)
(Transformations(Mathematics))

SIWEK, E. (Krakow)

On the transitivity domains of a transformation group of components
of a second order covariant tensor. *Annales pol math* 10 no.3:217-224
'61.

(Groups, Theory of)
(Transformations(Mathematics))
(Calculus of tensors)

SIWEK, Edward

A property of p-cones in the Euclidean space of n dimensions.
Prace matem Krakow no.7:67-68 '62.

SIMEK, Elzbieta

Preliminary studies on the productivity of in-the-field tree stands.
Postepy nauk roln 9 no.4:45-54 Jl-Ag '62.

~~KAZIMIERZ SIWEK~~ Siwek, K.
POLAND/Chemical Technology - Chemical Products and Their
Application, Part 3. - Chemical Wood Pulp Industry,
Hydrolysis Industry.

H-23

Abs Jour : Ref Zhur - Khimiya, No 7, 1958, 22811
Author : Kazimierz Siwek
Inst : -
Title : Technical Control of Products of Soft Resin Extraction
from Tarred Stumps.
Orig Pub : Przem. drzewny, 1956, 7, No 8, 14-17; No 9, 25-27; No 10,
20-23.

Abstract : The necessity to carry out the technical control of products, as well as of the technical process correctly is emphasized. The tarred stumps are divided into 3 groups depending on the moisture: the moisture of the I group is below 20%, the moisture of the II group is from 20 to 25%, and the moisture of the III group is above 25%. The content of resinous matter in the I group is 10 to

Card 1/2

POLAND/Chemical Technology - Chemical Products and Their
Application, Part 3. - Wood Pulp Industry,
Hydrolysis Industry.

H-24

Abs Jour : Ref Zhur - Khimiya, No 14, 1958, 48247

Author : Kazimierz Siwek

Inst :

Title : Soft Resin Distillation.

Orig Pub : Przem. drzewny, 1957, 8, 17-20.

Abstract : The technology of soft resin treatment, as well as the methods of storing, transportation, preliminary cleaning and distillation of soft resin are presented. Various types of stills are described (3 schemes are presented).

Card 1/1

SIWEK, KAZIMIERZ

H-24

POLAND/Chemical Technology, Chemical Products and Their Application, Part 3. - Wood Pulp Industry, Hydrolysis Industry.

Abs Jour: Referat. Zhurnal Khimiya, No 10, 1958, 33977.

Author : Kazimierz Siwek.

Inst : Not given.

Title : Problem of Moisture and Size of Tar Impregnated Wood Shavings in Extraction Process.

Orig Pub: Przem. drzewny, 1957, 8, No 7, 20-24.

Abstract: The influence of the moisture and the size of shavings, as well as of the extraction duration of tar impregnated wood on colophony yield was studied under laboratory and industrial conditions. The colophony yield rises as follows: at the decrease of the shavings moisture from 31.3% to 17.2% by 30.6%, and at the reduction

Card : 1/2

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SIWEK, Waclaw; STANOSEK, Jozef

Jirgle's flocculation test in infectious hepatitis. Pediat. pol.
39 no.1:33-38 Ja'64

1. Z Kliniki Chorob Zakaznych Slaskiej AM w Bytomiu; Kierownik:
prof. dr. med. K.Szymonski.

L 01791-67 T JK
ACC NR: AI 6035149

(A)

SOURCE CODE: PO/0081/65/019/002/0192/0193

SAWARYN, Tomira and SIWEK, Waclaw; Clinic of Infectious Diseases of Silesian
Academy of Medicine (Klinika Chorob Zakaznych Sl. AM), Bytom

24
B

"Treatment with Encorten of Viral Hepatitis in Diabetic Patients."

Warsaw, Przeglad Epidemiologiczny, Vol 19, No 2, 1965; p 192-193.

Abstract: Data from 56 diabetic patients treated for diabetes from 2 to 10 years before the appearance of viral hepatitis; the ages were 30 to 67. In 29 of these patients, Encorten [cortisone?], initially 50 mg daily dropping gradually to 5 mg at end; every 10 days for 2 days interrupted and replaced with 50 mg of ACTH. Results indicate that steroids offer definite advantages in the treatment of infectious hepatitis in diabetic patients, and that the reputed remissions of diabetes in infectious hepatitis are mainly due to a poor caloric diet during the dyspeptic phases of the disease. Presented at the 3rd Scientific Assembly of Polish Epidemiologists and Infectologists, Krakow, 5-6 Oct 64. [JPRS]

TOPIC TAGS: hepatitis, endocrine system disease, disease therapeutics, ACTH, endocrinology

SUB CODE: 06 / SUBM DATE: none

Card 1/1 Rf

FRYGIN, Czeslawa; SIWECKA, Maria.

Preparation of cell walls from Rickettsia prowazekii and
their preliminary analysis. Med. dosw. mikrobiol. 17 no.2:
143-152 '65.

1. Z Zakladu Bakteriologii Panstwowego Zakladu Higieny w
Warszawie (Kierownik: prof. dr. E. Wojciechowski).

SI RUDAK SLOWIŃSKI LUBLIN. (SLOWINSKI). ANTHONY SULPHITE.
POLISH AND U.S.). Państwowe Wydawnictwo Techniczne. 1971,

42 p.

SIWICKI, Jan

Mgr. Inz. Jan Siwicki: Technologia Paliwa i Wody, Warsaw: Państwowe Wydawnictwa Techniczne, 1954, 279 p. Reviewed in Roczniki Chemii, Vol 30, No 3, 1956.

SHELF 1, J.

C Dragan and S. Skupienski's Technologia ogolna. Czesc 1 (General Technology.
Pt. 1); a book review.

p. 192. (CHEMIK) (Warszawa, Poland) Vol. 10, no. 6, June 1957

SC: Monthly Index of East European Accession (EEAI) LC Vol. 7, No. 5, 1958

SIWICKI, Kazimierz, mgr inz.

The language at international conferences. Przegl techn 84 no.4:5
27 Ja '63.